Nebraska Pregnancy Risk Assessment Monitoring System (PRAMS) 2000 Surveillance Report



Office of Family Health
Nebraska Health and Human Services System
301 Centennial Mall South
Lincoln, NE 68509

October 2004

This project was conducted under the auspices of the Office of Family Health, Nebraska Health and Human Services System, in collaboration with the Centers for Disease Control and Prevention. Additional copies of this report can be obtained by contacting:

PRAMS Coordinator Nebraska Health and Human Services System Office of Family Health 301 Centennial Mall South Lincoln, NE 68509-5044 (402) 471-2091 Toll free (877) 873-1876

Nebraska PRAMS project staff are:

Jennifer Severe-Oforah, MCRP.
Debora L. Barnes-Josiah, Ph.D.
Brenda Coufal
Jerrie Michaelson

Principal Investigator, Coordinator Advisor, Coordinator (1999-2002) Data Manager Assistant

Acknowledgments

The NE PRAMS Project acknowledges the women of Nebraska who responded to the survey and made this report possible.

The NE PRAMS Project also acknowledges the contributions of the NHHSS Public Health Assurance Section of Data Management for access to the PRAMS sample and the CDC team for technical and programmatic support.

The Centers for Disease Control and Prevention (CDC) provided support to NE PRAMS with a Cooperative Agreement U50/CCU717127. Funding for NE PRAMS Project has also been provided in part by the Title V/MCH Block Grant, United States Department of Health and Human Services.

Reviewers

NHHSS PRAMS –Internal Committee
Debora Barnes-Josiah, Ph.D.
Paula Eurek, R.D.
Tina Kruthoff, M.Ed.
Leah Bucco-White

PRAMS Steering Committee –Data Sub-Committee Cheryl Darly-Carlberg, RN, BSN, CCE, IBCLC Jarret Dewitt Brandi Holys Tumbleson Sue Huffman

Requests for individualized and more detailed analysis should be made to the PRAMS coordinator at (402) 471-2091 or Jennifer.SevereOforah@hhss.state.ne.us

The CDC PRAMS Home Page is: http://www.CDC.gov/nccdphp/drh/srv_prams.htm

Introduction

The Nebraska Pregnancy Risk Assessment Monitoring System (PRAMS) is a collaborating member of the Centers for Disease Control and Prevention (CDC) initiative to reduce infant mortality and low birth weight. PRAMS is an ongoing, population-based surveillance system designed to identify, monitor and provide high quality, timely data on selected maternal health behaviors and experiences before, during, and after pregnancy among women who have had a live birth.

Nebraska is one of 33 states and cities formally participating in the CDC PRAMS initiative. The global goal of Nebraska PRAMS is to reduce infant morbidity and mortality by impacting maternal and child health programs, policies, and maternal behaviors relating to pregnancy and early infancy.

This NE PRAMS Surveillance Report is based on findings from a random sample of 2,687 Nebraska resident women who had a live birth in the year 2000; 86.2% of women selected to participate responded. The NE PRAMS survey has 82 questions covering a range of topics.

This report covers 10 featured topical areas chosen by the PRAMS Steering Committee. Each topic area covers the survey question(s) utilized to collect the data, a discussion of the topic, a data table, and notable finding from the data. Tables provide analysis of the overall population and by population stratum (race/ethnicity). This report illustrates disparities within the prenatal population in the State of Nebraska.

Using the Surveillance Report

Data in this report were obtained from the PRAMS questionnaire and the state birth certificate file. Eligible mothers were Nebraska residents who gave birth in the year 2000 and whose infants were registered in the Nebraska Vital Records database. This includes infants who were born out of state to Nebraska residents.

The PRAMS sample is a stratified random sample, with strata based on the race/ethnicity of the infant as recorded on the birth certificate. Participants are selected randomly from within the five racial/ethnic groups: Caucasian, African American, Native American, Asian American, and Hispanic. Non-Caucasian women are sampled at a higher rate to ensure adequate data are available in these smaller but higher risk populations. In order to report data from these strata, a response rate of 70% is required. In the year 2000 NE PRAMS did not reach 70% response rate for the Native American strata thus they will not be represented as a group in this report.

The data are weighted by the woman's selection probability. Because of this weighting the actual numbers of respondents for individual questions can not be determined from the reported percentages. However, the weighting allows the frequencies reported in this document to represent the entire population of live births in the State of Nebraska in the year 2000, and not simply those who were eligible to participate (and responded) in the survey. Typically, the annual sample is large enough for estimating statewide risk factor proportions within 3.5% with 95% confidence. Estimated proportions within strata are slightly less precise, typically, within 5% at 95% confidence. Additional, information on PRAMS methodology, stratification, weighting, and analysis procedures are available upon request.

Caution: groups whom exhibit similar frequencies in characteristics, experiences, or behaviors may not actually differ. Further tests are required to check for statistical significance. As mentioned above estimates in this report are given for the 24, 656 live births to Nebraska women in 2000 based on 2,131 respondents. Data is suppressed when there are fewer than 30 respondents.

Limitations

All survey results are based on self-report and may reflect an unknown degree of reporting bias.

This data can only be generalized to Nebraska residents who delivered live infants in the year 2000.

ⁱ http://www.cdc.gov/reproductivehealth/methodology.htm Centers for Disease Control and Prevention. PRAMS model surveillance protocol, 1999. Unpublished.

"Thanks for sending me this booklet to let you know what happened during my pregnancy. It helped me understand somethings about myself I did not know"

- Nebraska PRAMS Mother

Table of Contents

Characteristics of PRAMS Eligible Population	1
Family Planning	2
Insurance Status	7
Maternal Health	11
Maternal Weight Gain	14
Access to Prenatal Care	18
Prenatal Counseling	22
Pregnancy Services	24
Alcohol/Tobacco Use	26
Breastfeeding	31
Infant Risk Reduction	34

Characteristics of the PRAMS Eligible Population NE PRAMS 2000

Demographic/Health Variable	General	Population	PRAMS	Weighted	Response
	Population	Percent	Respondents	Distribution	Rate
Maternal Race/Ethnicity					
Caucasian	19,691	79.86%	900	80.1	88.7
African American	1,363	5.53%	336	5.54	71.7
Native American	425	1.72%	169	1.65	60
Asian/Pacific Islander	575	2.33%	265	2.16	75.9
Hispanic	2,602	10.55%	461	10.55	81.9
Total	24,656	100.00%	2131	100.00%	-
		•	•		
Maternal Age					
Under 20	2,465	10.00%	251	10.47	
20-24	6,063	24.59%	564	23.56	
25-29	7,450	30.22%	654	31.55	
30 and Over	8,678	35.20%	662	34.42	
Total	24,656	100.00%	2131	100.00%	
		_	_		
Maternal Education					
0-11 Years	3,759	15.28%	532	15.93	.
12 Years	6,825	27.74%	598	27.25	
13-15 Years	6,678	27.14%	480	25.2	
16 or More Years	7,344	29.85%	518	31.62	
Total	24,606	100.00%	2128	100.00%	-
		_	_		
Residence					
Metropolitan	13,433	54.48%	1297	54.8	
Non-Metropolitan	11,223	45.52%	834	45.2	
	24,656	100.00%	2131	100.00%	
Marital Status	45.55	50.040 /	4000		
Married	17,952	72.81%	1388	72.54	
Other	6,704	27.19%	743	27.46	
Total	24,656	100.00%	2131	100.00%	
Deternal Age					
Paternal Age Under 20	681	3.14%	160	7.58	
20-24	3,514		92	7.36 5.11	
		16.18%			
25-29	6,391	29.43%	604	35.64	
30 and Over	11,127	51.25%	877	51.67	-
Total	21,713	100.00%	1733	100.00%	
Paternal Education					
0-11 Years	2,689	11.02%	379	13.45	
12 Years					
	6,449	26.43%	520	29.76	
13-15 Years	5,618	23.03%	396	25.4	
16 or More Years	9,641	39.52%	490	31.39	
Total	24,397	100.00%	1785	100.00%	
Infant Birthweight					
LBW (<2500 Grams)	1,691	6.86%	137	5.46	
NBW (2500 Grams)	22,959	93.14%	1992	94.54	
Total	24,650	100.00%	2129	100.00%	
iotai	24,030	100.00 /6	2129	100.00%	

Family Planning

Timing of Pregnancy

The Survey Question

Thinkir pregnar	ng back to <i>just before</i> you got pregnant, how did you feel about becoming nt?
Check	one answer
	I wanted to be pregnant sooner
	I wanted to be pregnant later
	I wanted to be pregnant then
\Box	I didn't want to be pregnant then or at any time in the future

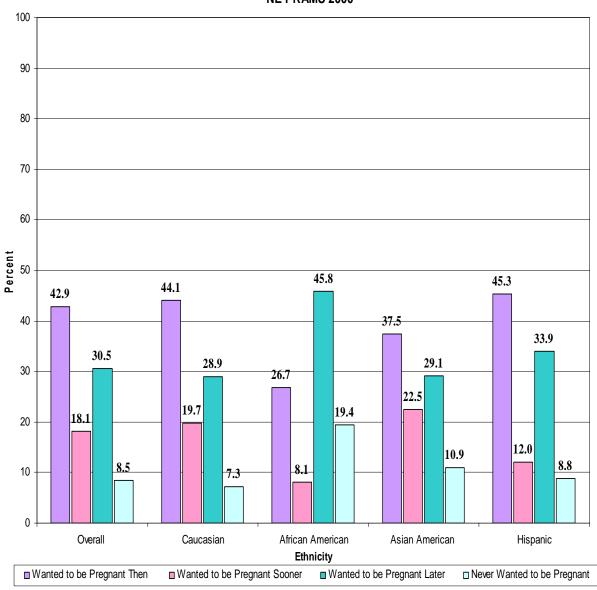
Discussion

This survey question was designed to probe feelings at the *time of conception*, rather than at the time of birth. It is thus unable to measure the complicated mix of feelings that can occur during a pregnancy. This distinction is important because a woman's feelings can change in many ways over the course of pregnancy.

The definition of intended pregnancy is whether at the time of conception a woman wanted to be pregnant either then or sooner. Unintended pregnancy means that at the time of conception a women either wanted to be pregnant later or did not want to be pregnant at any time in the future. Pregnancy intention is related to infant outcomes such as low birth weight and to maternal behaviors such as smoking, drinking, illicit drug use, failure to take prenatal vitamins and failure to initiate prenatal care visits¹.

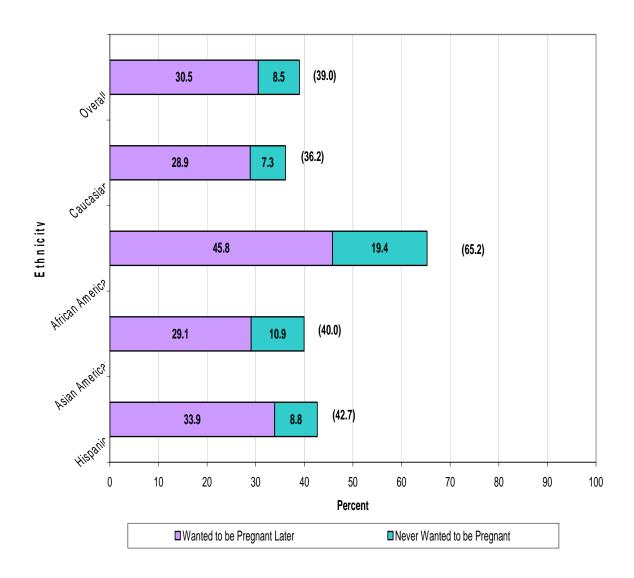
¹ Institute of Medicine Committee on Unintended Pregnancy. "The Best Intentions: Unintended Pregnancy and the Well-being of Children and Families", National Academy Press, 1995.

Figure 1
Timing of Pregnancy
NE PRAMS 2000



Overall in Nebraska, 61% of women reported intended pregnancy (wanted sooner or then). The highest frequency of intended pregnancy was among Caucasians (68.8%) followed by Asian Americans (60%).

Figure 2
Unintended (Mistimed + Unwanted Pregnancy)
NE PRAMS 2000



Nearly one half of African Americans reported mistimed pregnancies (wanting to be pregnant later) while one in five never intended to be pregnant (then or in the future). Combined, the prevalence of unintended pregnancy for African Americans in Nebraska reached 65.2% by far the highest among race/ethnicity groups and much higher than the overall prevalence for the state (39%).

Contraception Use Among Women Not Trying to Become Pregnant

The S	Survey C	uestio	<u>n</u>										
	When	•	got p	regnant	with	your	new	baby,	were	you	trying	to	become
		No Yes											
If No	Then												
	•	, .		gnant wi	•		•	, were y	ou or	your	husban	d or	partner
		No Yes											

Discussion

These survey questions define Contraception as: "Some things people do to keep from getting pregnant including not having sex at certain times, and using birth control methods such as: the pill, Norplant[®], shots (Depo-Provera[®]), condoms, diaphragm, foam, IUD, having their tubes tied, or their partner having a vasectomy."

It was not uncommon to learn from a post-partum woman that she did not "intend" to become pregnant but was also not using contraception.

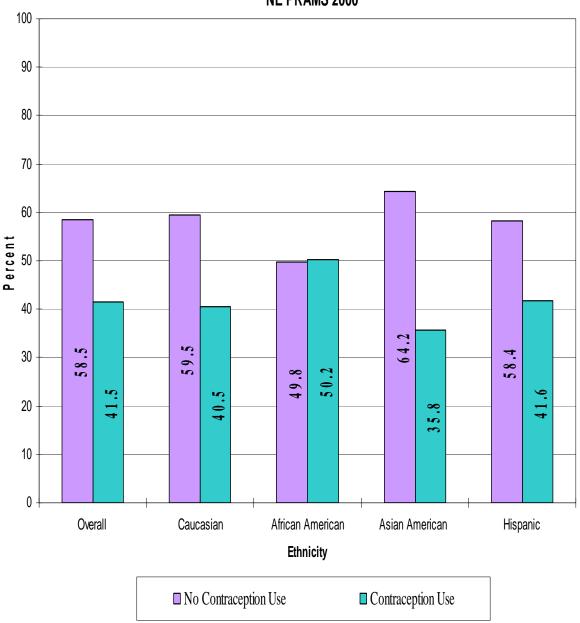
In Nebraska, the most cited reasons for not using contraception were:

- "I thought I could not get pregnant at the time"
- "I did not mind if I got pregnant"
- "My husband or partner did not want to use anything".

Many women and couples who are not seeking pregnancy will move back and forth between using and not using contraception, which illustrates the ambiguity that can accompany pregnancy². This ambiguity demonstrates why the terms "intended" and "unintended" pregnancy can be awkward as they imply that a pregnancy can clearly be labeled as one or the other.

² Institute of Medicine Committee on Unintended Pregnancy. "The Best Intentions: Unintended Pregnancy and the Well-being of Children and Families", National Academy Press, 1995.

Figure 3
Use (Failure) of Contraception by Those Not Trying to Become Pregnant
NE PRAMS 2000



Among the overall population, 41.5% of women who became pregnant were utilizing contraception, which failed. This varies widely by race/ethnicity. African American mothers reported the highest contraception failure (50.2%) followed by Hispanics (41.6%), Caucasians(40.5%) and Asian Americans

Insurance Status

The Survey Questions

ore you got pregnant, were you on Medicaid?
No Yes
Fore you got pregnant, did you have health insurance?
No Yes
as your prenatal care paid for? Check all that apply
Medicaid Personal income (cash, check, or credit card) Health insurance or HMO Medicaid Managed Care Indian Health Services or Tribal clinic Other
as your delivery paid for? Check all that apply
Medicaid Personal income (cash, check, or credit card) Health insurance or HMO Medicaid Managed Care Indian Health Service or Tribal clinic Other:

Those Covered by Health Insurance or Health Maintenance Organization

Discussion

NE PRAMS is unable to determine why the reported prevalence of private insurance appears to decrease over the course of pregnancy. However, there are several reasons reported in the literature for similar findings: 1) Employment is terminated (by employer or by employee) due to pregnancy or medical complications of pregnancy; 2) Migration to another state; 3) Health plan does not cover pregnancy or has a large deductible.

100 90 78.4 80 73.5 72.8 70.4 70.0 70 67.2 64.7 64.2 60 Percent 50 43.2 40 30.4 29.4 30.2 30 22.9 23.0 20 10 0 Hispanic Overall Caucasian African American Asian American Ethnicity Prenatal Care Pre-Pregnancy Delivery

Figure 4
Those Covered by Health Insurance or Health Maintenance Organization
NE PRAMS 2000

Nebraska Notable Findings:

While the overall frequency for the privately insured in Nebraska is not particularly high it is extremely low for Hispanics. The decrease in private insurance coverage over pregnancy is the highest for African Americans, with a drop of 31.9% from pre-pregnancy to the time of delivery. Note that Asian Americans and Caucasians have the highest prevalence of private insurance.

Those Covered by Medicaid

Discussion

Medicaid is a health insurance program for qualified individuals that is funded and administered through a State-Federal partnership. In an attempt to assure the healthiest possible pregnancy, Medicaid income eligibility limits are increased for pregnant women (or unborn child) in all states to provide prenatal care. In Nebraska, a woman and her unborn child are eligible for Medicaid coverage during pregnancy if her income is equal to or less than 150% of the Federal Poverty Level (\$1,515/month). ³

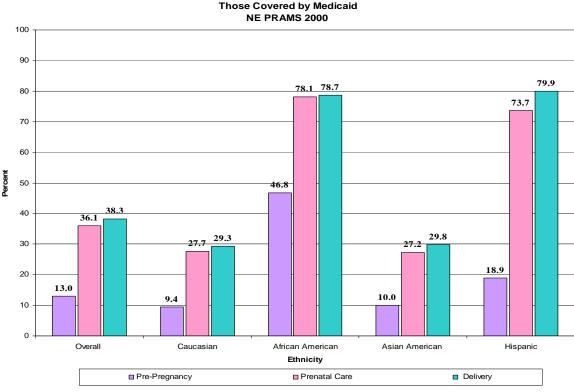


Figure 5 Those Covered by Medicaid

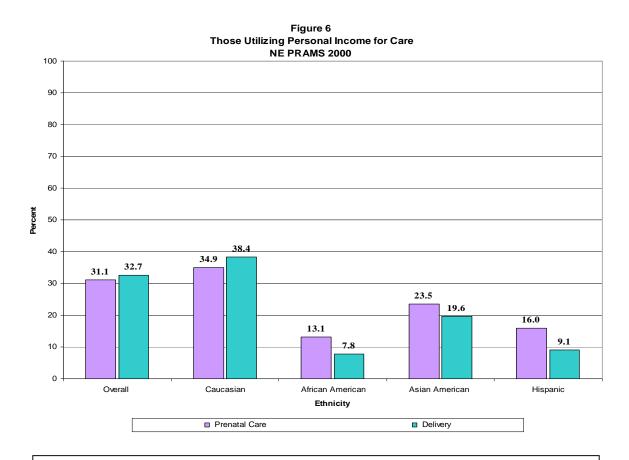
Nebraska Notable Findings:

Prior to pregnancy, Nebraska Medicaid insured only 13% of the overall population. Medicaid paid for approximately two in five of all deliveries (38.3%). Close to half (46.8%) of African Americans were insured by Medicaid prior to pregnancy; that frequency increased by 68.2% (to 78.7%) at the time of delivery. However, Hispanics represented the largest increase in Medicaid coverage, rising by 61% from prepregnancy to delivery.

³ http://www.cms.hhs.gov/hiv/maternal4.asp

Discussion

Some individuals do utilize personal income to pay for the entire cost of care. However, many people contribute to their health care costs with personal income through a co-pay or deductible. Further, it is not unusual for individuals to have more than one source of payment for their prenatal care and delivery, thus frequencies across Figures 4, 5, and 6 will sum to more than 100%. Figure 6 represents the prevalence of those who contributed personal income (some or all) to their prenatal care and/or delivery costs.



Nebraska Notable Findings:

In Nebraska, approximately one in three women contributed personal income to the cost of their healthcare. However, this graph can be misleading as a majority (87.3 prenatal care and 91.2% delivery) of these women utilized personal income as copay for private health insurance or Medicaid. Only a small percentage (3.5% of the entire population) utilized personal income as the sole payment source for prenatal care while even fewer (2.1% of the entire population) utilized personal income as the sole payment source for delivery.

Maternal Health

The Survey Questions

Did you have any of these problems during your pregnancy?

- a. Labor pains more than 3 weeks before you baby was due (preterm or early labor)
- b. High blood pressure (including preeclampsia or toxemia) or retained water (edema)
- c. Vaginal bleeding
- d. Problems with the placenta (such as adruptio placentae, placenta previa)
- e. Severe nausea, vomiting, or dehydration
- f. High blood sugar (diabetes)
- g. Kidney or bladder (urinary tract) infection
- h. Water broke more than 3 weeks before your baby was due (premature rupture of membrane, PROM)
- i. Cervix had to be sewn shut (incompetent cervix, cerclage)
- j. You were hurt in a car accident

If Yes Then

Did you	do any of the following things because of these problem(s)?
	I went to the hospital or emergency room and stayed less than 1 day I went to the hospital and stayed 1 to 7 days I went to the hospital and stayed more than 7 days I stayed in bed at home more than 2 days because of my doctor's or nurse's advice

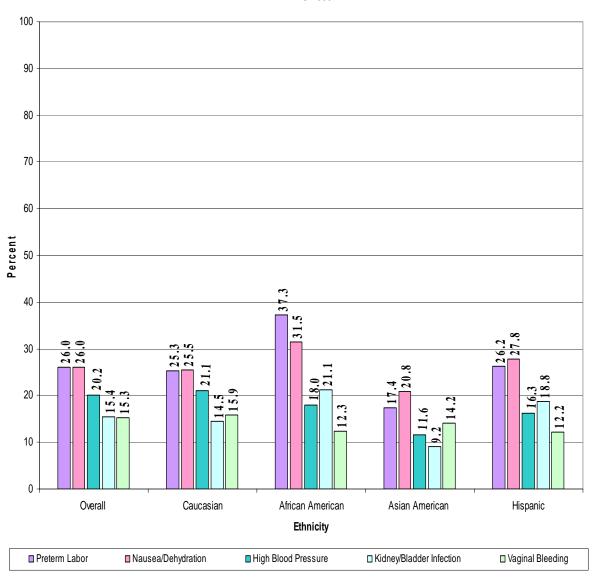
Top Five Self-Reported Medical Problems During Pregnancy

<u>Discussion</u>

Figure 7 represents the top 5 self-reported medical problems during pregnancy (see above survey question); these are not necessarily medical diagnoses. For example, the rate of women reporting labor pains more than three weeks before the baby was due (preterm or early labor) was 26% overall, while birth certificate data report a preterm labor prevalence of only 3.2% overall. The discrepancy is likely due in part to differences between what women and physicians consider labor pains/preterm labor, mother's reporting error (misunderstood the question) and perhaps under-reporting on birth certificates.

Frequencies in Figure 7 are not mutually exclusive, as some women have multiple complications; these women will be represented more than once.

Figure 7
Top Five Medical Problems During Pregnancy
NE PRAMS 2000



The most striking finding is the high prevalence of preterm labor among African American women (37.5%), more than 10% higher than the overall population. Overall, preterm labor and severe nausea/dehydration are tied for the number one self-reported medical problem during pregnancy. However, in several segments of the population (Caucasians, Asian Americans, and Hispanics), nausea/dehydration was the most prevalent. High blood pressure and vaginal bleeding are highest among Caucasian women while kidney and bladder infections are highest among African American and Hispanic women.

Hospitalization Among those Reporting Medical Problems During Pregnancy

Discussion

Figure 8 indicates the frequency of hospitalization for only those women who experienced a self-reported medical problem (see survey questions, page 11, and discussion for Figure 7). The majority of hospitalizations reflect a visit duration of less than one day (36.1% overall), but also include more serious stays of 1-7 days (15.2% overall) and very serious cases of more than 7 days (1.7 % overall).

These numbers are not mutually exclusive; some women have higher levels of morbidity and or high-risk pregnancies that result in multiple trips to the hospital for more than one reason and for varying duration across a single pregnancy.

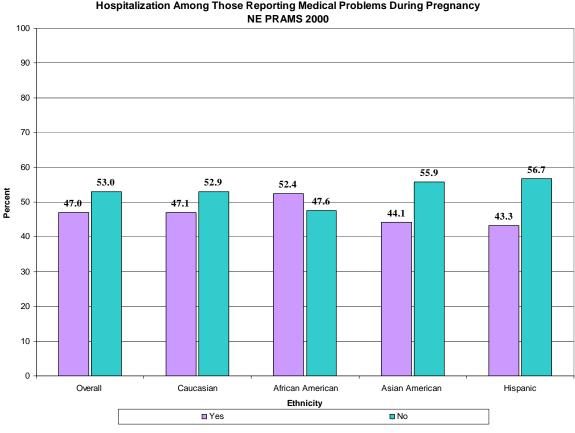


Figure 8 Hospitalization Among Those Reporting Medical Problems During Pregnancy

Nebraska Notable Findings:

Overall and across populations, frequencies are relatively consistent for the PRAMS data set. African American women have the highest prevalence of hospitalization.

Maternal Weight Gain

The Survey Questions

Just before you got pregnant, how much did you weigh?

How tall are you without shoes?

How much weight did you gain during your pregnancy?

Pre-Pregnancy BMI

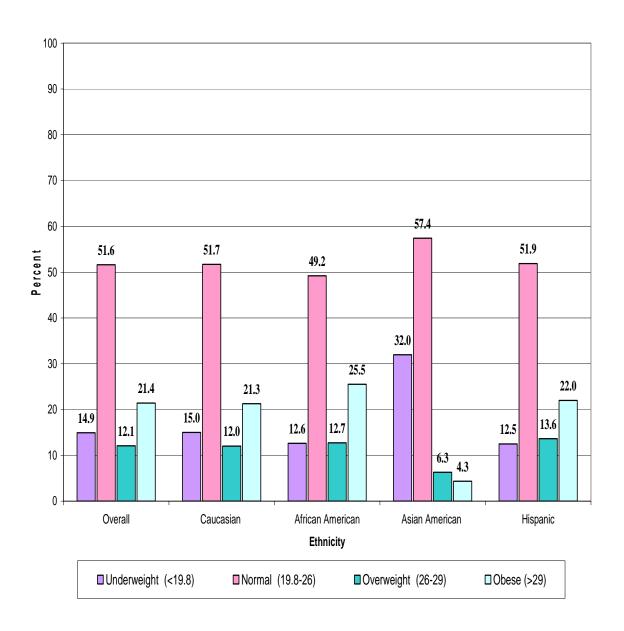
Discussion

BMI (Body Mass Index) is an index number that shows body weight adjusted for height. Calculating BMI is one of the best methods for population level assessment of overweight and obesity. The use of BMI also allows people to compare their own weight status to the general population. The only information required to calculate a person's BMI are height and weight.

Note that the BMI ranges below are specific for women who became pregnant; ranges for the general adult population are more restrictive. Pre-Pregnancy BMI is categorized as underweight, normal, overweight, or obese.

BMI	Status
Less than 19.8	Underweight
19.8 - 26.0	Normal
26.1 - 29.0	Overweight
More than 29	Obese

Figure 9
Pre-Pregnancy BMI
NE PRAMS 2000



Overall, 33.5% of women were overweight or obese prior to pregnancy. Asian Americans had the most favorable pre-pregnancy BMI with only 10.6% of the population presenting overweight or obese. The highest rates of overweight and obesity pre-pregnancy were among African Americans.

Adequacy of Weight Gain

Discussion

Weight gain is desirable for all women since it is essential for normal fetal growth. The risk of low birth weight and intrauterine growth retardation is increased among infants born to women with inadequate weight gain during pregnancy. Inadequate maternal weight gain during the third trimester of pregnancy is associated with increased risk of spontaneous preterm delivery.

Excessive weight gain is associated with excessive postpartum weight retention. Subsequent weight retention is of concern, given the increasing obesity among US women and the associated risks for cardiovascular disease, diabetes, and certain types of cancer.⁵

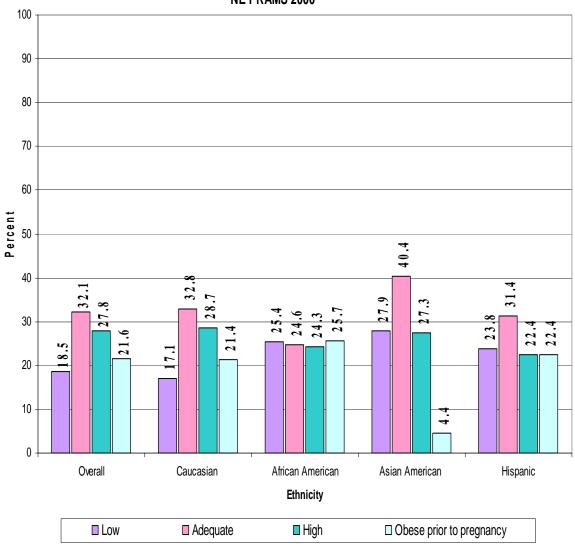
The Institute of Medicine guidelines for weight gain during pregnancy are the standard most commonly used in the United States. The guidelines incorporate pre-pregnancy body mass index (BMI) in setting the recommended weight gain ranges.

Pre-Pregnancy BMI	Recommended Weight Gain for a Singleton Pregnancy
Less than 19.8	28-40 lbs.
19.8 - 26.0	25-35 lbs.
26.1 - 29.0	15-25 lbs.
More than 29	15 lbs.

_

⁵ Subcommittee on Nutritional Status and Weight Gain During Pregnancy, Institute of Medicine. <u>Nutrition During Pregnancy</u>. Washington, DC: National Academy Press, 1990.

Figure 10
Adequacy of Weight Gain
NE PRAMS 2000



Overall, only 32.1% of pregnant women met weight-gain recommendations. In general underweight women tended to gain too little while normal and overweight women gained too much. Asian American women were more likely to gain too little (27.9%) and adequate (40.4%) amounts of weight, Caucasian women were most likely too gain to much weight (28.7%), while African American women were most likely to be obese (25.7%) prior to pregnancy.

Access to Prenatal Care

The Survey Question

How many weeks or months pregnant were you when you had your first visit for prenatal care?

Did you get prenatal care as early in your pregnancy as you wanted?

If No Then

Did any of these things keep you from getting prenatal care as early as you wanted?

Check <u>all</u> that apply

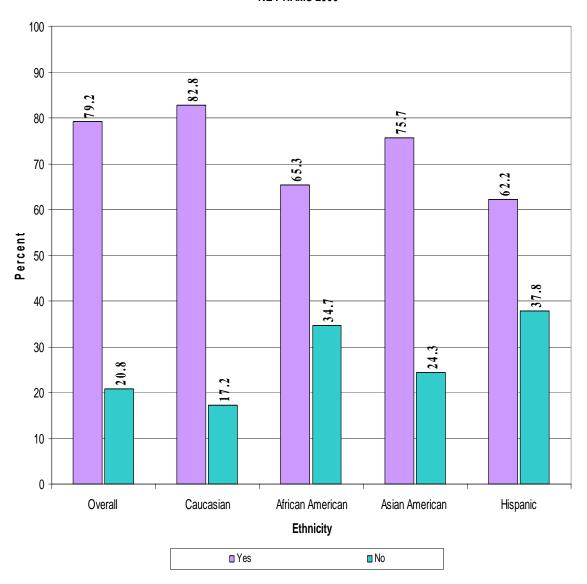
I couldn't get an appointment earlier in my pregnancy
I didn't have enough money or insurance to pay for my visits
I didn't know that I was pregnant
I had no way to get to the clinic or doctor's office
The doctor or my health plan would not start care earlier
I didn't have my Medicaid card
I had no one to take care of my children
I had too many other things going on

Prenatal Care in the First Trimester

Discussion

Starting prenatal care as early as possible is thought to help produce the healthiest birth outcomes. Early prenatal care allows for individualized counseling about healthy lifestyles, and also helps to detect severe medical complications that place the mother or fetus at high risk of illness or death.

Figure 11
Prevalence of 1st Trimester Prenatal Care
NE PRAMS 2000



Overall, eight of 10 women accessed prenatal care in the first trimester of pregnancy. The population most likely to do so was Caucasian (82.8%) followed by Asian Americans at 75.7%. The Hispanics were least likely to get early prenatal care (62.2%) followed closely by African Americans (65.3%). Figure 12 explores the barriers to early prenatal care.

Barriers to Prenatal Care

Discussion

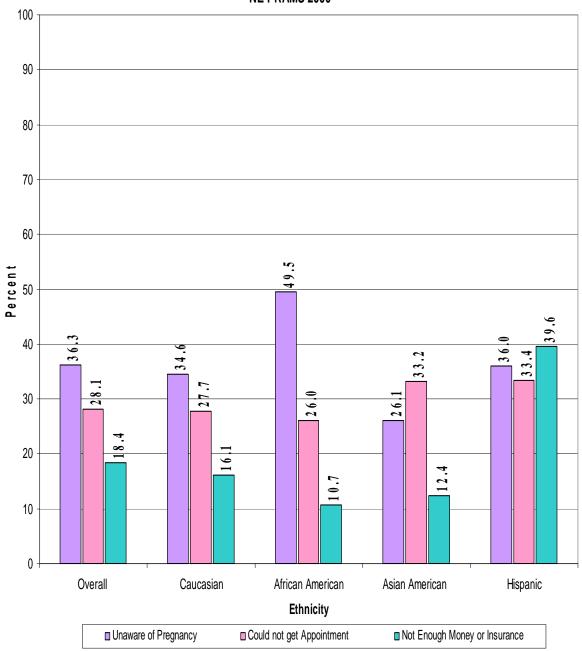
The survey design limits this discussion because only those who were dissatisfied with the timing of prenatal care were asked to express the barriers they experienced. The top three barriers to early prenatal care are illustrated in Figure 12.

It is important to note the distinction that those who received early prenatal care (first trimester) still may have experienced dissatisfaction with the timing of prenatal care. While there were a total of eight barrier options identified by the survey, the three reported were the only significant findings.

Notable Nebraska Findings:

The overall population and the Caucasian population mirror each other with one in three women expressing the top barrier as being unaware of the pregnancy. Being unaware of pregnancy is by far the top barrier to prenatal care for African Americans (49.5 %) who were dissatisfied with the timing of their prenatal care. One in four (26.0%) of African Americans also reported an inability to get an appointment when they desired as a barrier. Not being able to get an appointment was the top barrier for Asian American women despite the fact that 75.7% of Asian American women reported receiving prenatal care in the first trimester. Hispanic women reported across all three barriers consistently. However, nearly 40% reported lack of money or insurance as a barrier; this was higher than any other group and the state overall.

Figure 12
Top Three Barriers to Early Prenatal Care
NE PRAMS 2000



Prenatal Counseling

The Survey Question

During any of your prenatal care visits, did a doctor, nurse, or other health care worker talk with you about any of the things listed below?

- a. How smoking during pregnancy could affect your baby
- b. Breastfeeding your baby
- c. How drinking alcohol during pregnancy could affect your baby
- d. Using a seat belt during your pregnancy
- e. Birth control methods to use after your pregnancy
- f. How using illegal drugs could affect your baby
- g. Doing tests to screen for birth defects or diseases that run in your family
- h. What to do if your labor starts early
- i. Getting your blood tested for HIV (the virus that causes AIDS)
- j. Physical abuse to women by their husbands or partners

Discussion

This question investigates prenatal counseling/education received during pregnancy. PRAMS offers unique insight into the dynamics of prenatal care while all of these topics should be addressed by a healthcare worker little is known about the prevalence of such discussions. Within a medical setting it is not surprising to see that medical topics such as early labor and breastfeeding are discussed more frequently than lifestyle topics such as substance use.

While Figure 13 documents counseling during pregnancy, it does not indicate whether any interventions were provided nor does it document the quality of the counseling. Therefore a nurse may have informed the mother about the effects of alcohol consumption/binge drinking on the developing fetus, but never discussed, actual alcohol consumption and/or where to get help if needed with her.

Topics Discussed by Healthcare Worker During Prenatal Care NE PRAMS 2000 100 90 83.0 80 70 60. 60 40 30 20 10 Overall Caucasian African American Asian American Hispanic Ethnicity ■ Seatbelt Use ■ Drug Use □ Early Labor Smoking □ Alcohol ■ Birth Defects □ Breastfeeding

Figure 13

Notable Nebraska Findings:

Overall proper seatbelt use was least often discussed, while signs of early labor and breastfeeding were discussed most often among all groups and overall. Responses show a considerable amount of variation in topics discussed by race/ethnicity. For instance, there is a 23.3% disparity between Caucasian and African Americans on whether the topic of drug use is discussed.

Pregnancy Services

The Survey Questions

During your pregnancy, were you on WIC (the Special Supplemental Nutrition Program for Women, Infants, and Children)?

During your most recent pregnancy, did you get any of these services?

- a. Childbirth classes
- b. Parenting classes
- c. Classes on how to stop smoking
- d. Visits to your home by a nurse or other health care worker
- e. Food stamps
- f. TANF (Welfare, formerly AFDC)

Discussion

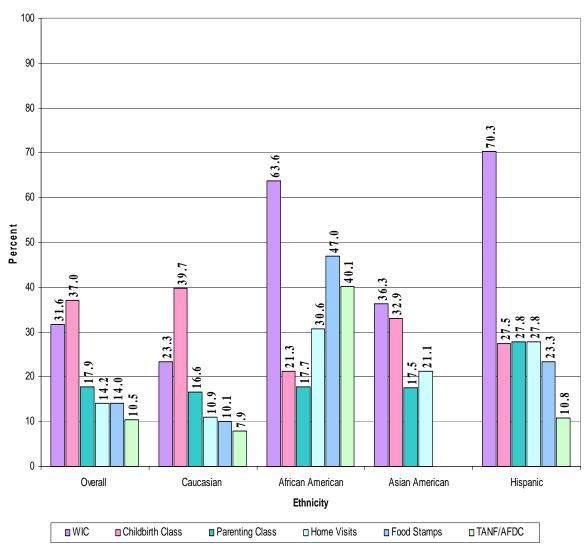
These questions address a variety of possible services available to pregnant women. Several of these services such as WIC (Special Supplemental Nutrition Program for Women, Infants, and Children), smoking cessation, Food Stamps, and TANF have income eligibility requirements.

Educational classes are widely available through local hospitals and can differ greatly in content. There is usually a charge for participation. Women who are pregnant for the first time are more likely to enroll in these educational courses.

WIC is a program that is solely for pregnant/new mothers, infants, and small children. Although, a family can receive subsidies from both WIC and Food Stamps at the same time.

Smoking cessation is an intervention that is important for pregnant women and new mothers as smoking has associations with poor birth outcomes while any environmental tobacco smoke has been linked with SIDS (Sudden Infants Death Syndrome) and early childhood illness.

Figure 14
Services Received During Pregnancy
NE PRAMS 2000



Overall WIC and child birthing classes were the top two services received by pregnant women in Nebraska in the year 2000. African American (three of five women) and Hispanic (seven of 10) women reported the highest rates of WIC, TANF, and Food Stamp participation during pregnancy. Frequencies of participation in TANF and Food Stamps were not reportable for Asian Americans.

Alcohol/Tobacco Use

Alcohol Consumption

The Survey Questions

Have you had any alcoholic drinks in the past 2 years?

During the 3 months before you got pregnant, how many alcoholic drinks did you have in an average week?

During the last 3 months of your pregnancy, how many alcoholic drinks did you have in an average week?

Since your baby was born, how many alcoholic drinks do you have in an average

week?

Discussion

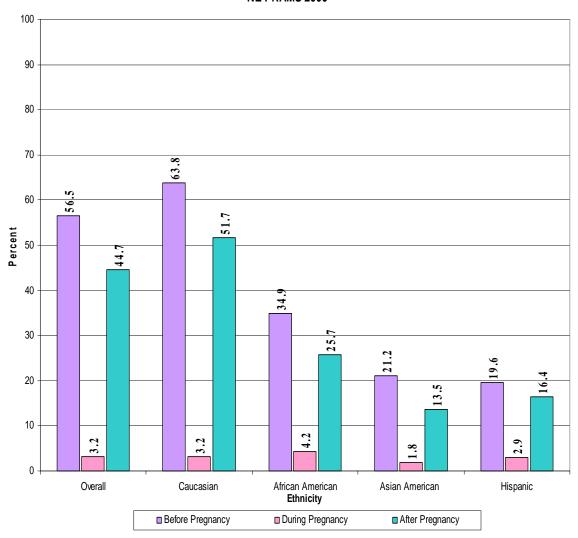
Prenatal exposure to alcohol use is one of the common causes of mental retardation and neurodevelopment disorders, and is the only cause that is entirely preventable. Alcohol exposure is also associated with miscarriages and low birth weight. There is no known safe level of prenatal alcohol consumption or safe time to drink during pregnancy. ⁶

Exposure to alcohol can be most harmful in the early weeks of pregnancy when major systems including the nervous system and brain begin forming (as early as three weeks ⁶); this is often before the mother knows she is pregnant.

Often women are unaware of pregnancy until 8 -10 weeks of gestation therefore, PRAMS asks about alcohol use in the three months prior to pregnancy as a proxy for first trimester alcohol consumption. It is important to remember that PRAMS is self-reported data.

⁶ March of Dimes Fact sheets. http://www.modimes.org/professionals/681_1170.asp?link=10597Title

Figure 15
Alcohol Consumption
NE PRAMS 2000



Over one-half of the overall population reported pre-pregnancy alcohol consumption. Consumption was reduced by 53.3% during the pregnancy, but returned to near pre-pregnancy rates in the 6 months post-partum. This pattern occurred in all sub-populations. However, Caucasians reported the highest prevalence of alcohol consumption pre-and post-pregnancy. African Americans had the highest (although still low) pregnancy percentage.

Tobacco Use

The Survey Questions

Have you smoked at least 100 cigarettes in the past 2 years?

In the 3 months before you got pregnant, how many cigarettes or packs of cigarettes did you smoke on an average day? (A pack has 20 cigarettes.)

In the last 3 months of your pregnancy, how many cigarettes or pack of cigarettes did you smoke on an average day?

How many cigarettes or packs of cigarettes do you smoke on an average day now?

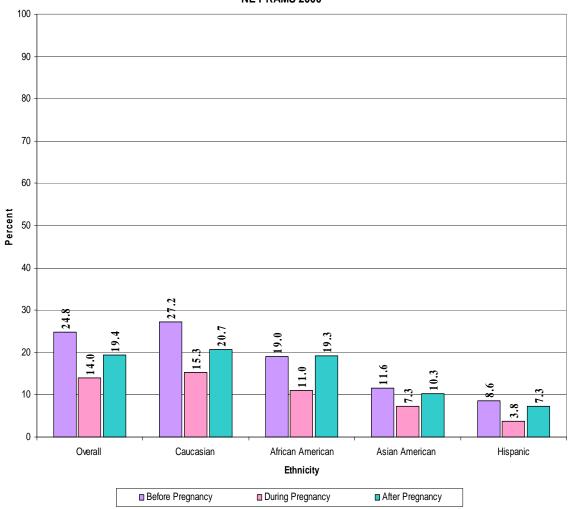
About how many hours a day, on average, is your new baby in the same room with someone who is smoking?

Discussion

Smoking during pregnancy is associated with increased risk for premature rupture of membranes, abruptio placenta (separation of the placenta from the uterus), and placenta previa (abnormal location of the placenta) which can cause massive hemorrhaging during delivery. Smoking is also associated with a modest increase in risk for preterm delivery. Infants born to women who smoke during pregnancy have a lower average birth weight and are more likely to be small for gestational age than infants born to women who do not smoke. Low birth weight is associated with increased risk for neonatal, perinatal, and infant morbidity and mortality. The longer the mother smokes during pregnancy, the greater the effects on the infant's birth weight. The risk for perinatal mortality, both stillbirths and neonatal deaths and the risk for sudden infant death syndrome (SIDS) are higher for the offspring of women who smoke during pregnancy.⁷

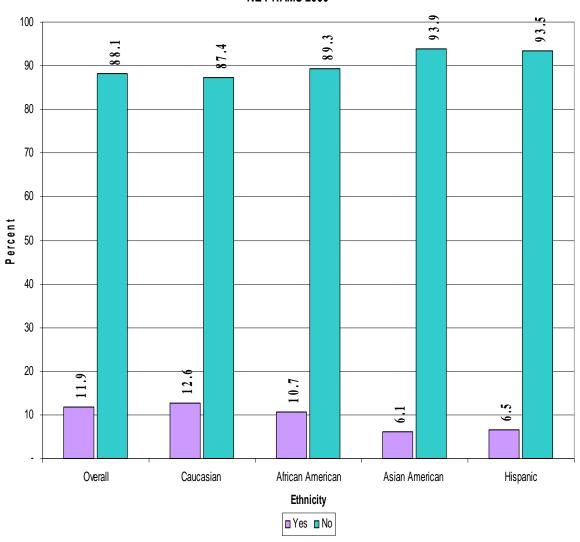
⁷ Women and Smoking, a Report of the Surgeon General, 2001. http://www.cdc.gov/tobacco/sgr/sgr forwomen/factsheet outcomes.htm

Figure 16 Tobacco Use NE PRAMS 2000



Overall, nearly one in four women smoked cigarettes prior to pregnancy and 10.8% quit during pregnancy. However, one in five of the overall population reported smoking post-partum. This pattern held for all sub-populations. The only group to show significant if small reduction in the prevalence post-partum of smoking was the Caucasian strata.

Figure 17
Environmental Tobacco Exposure
NE PRAMS 2000



Overall, 11.9 % of infants were exposed to environmental tobacco smoke in the home on a daily basis. The highest frequency was among Caucasians, who also reported the highest prevalence of tobacco consumption post-partum. The lowest incidence of environmental tobacco exposure was among Asian Americans.

Breastfeeding

The Survey Questions

		you very?	ever	breastfe	ed o	r pur	np	breast	milk	to	feed	your	new	baby	after
				No Yes											
If Yes	The	<u>n</u>													
	How	man	y wee	eks or mo	nths	did y	ou	breastf	eed or	· pu	mp m	ilk to	feed y	our ba	aby?
		_		Weel	s Ol	₹		Mo	onths						
				Less tha	n 1 v	veek									

Discussion

Human milk and infant formula are different. Not only does human milk provide all the protein, sugar, fat, and vitamins a baby needs to be healthy, but it has special benefits that formulas cannot match. It helps protect infants against certain diseases and infections. Because of the protective substances in human milk, breastfed children are less likely to have ear infections (otitis media), allergies, vomiting, diarrhea, pneumonia, and meningitis. Research also suggests that breastfeeding may help to protect against Sudden Infant Death Syndrome (SIDS).⁸

NE PRAMS does not ask specific reasons for not breastfeeding. Some common reasons reported in the literature include a preference for bottle feeding, low birth weight and/or premature birth leading to problems with the infant "latching on", fear of nipple pain, cesarean delivery, and lack of information. Initiating breastfeeding without support can be difficult for some women.

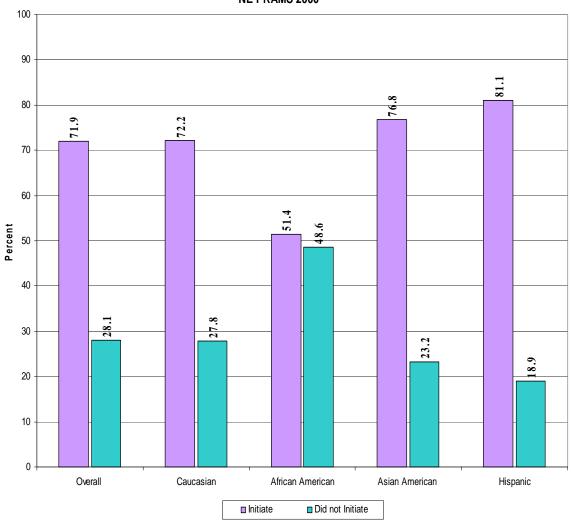
The American Academy of Pediatrics Policy Statement⁹ reads

Exclusive breastfeeding is ideal nutrition and sufficient to support optimal growth and development for approximately the first 6 months after birth. Gradual introduction of iron-enriched solid foods in the second half of the first year should complement the breast milk diet. It is recommended that breastfeeding continue for at least 12 months, and thereafter for as long as mutually desired.

⁸ A Women's Guide to Breastfeeding, American Academy of Pediatrics. http://www.aap.org/family/brstguid.htm

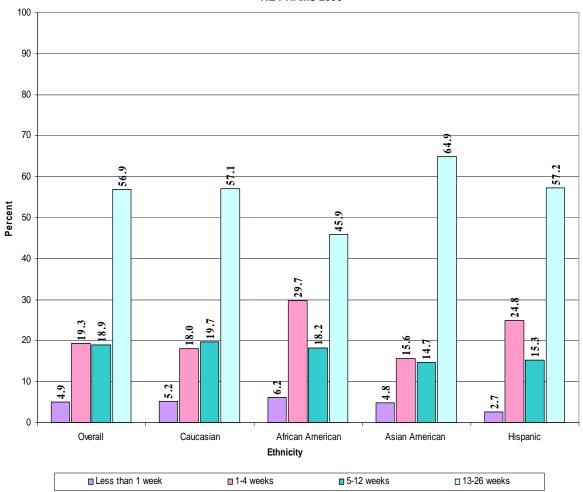
⁹ Breastfeeding and the use of human milk. American Academy of Pediatrics. Work Group on Breastfeeding. Pediatrics. 1997 Dec;100(6):1035-9.

Figure 18: Initiation of Breastfeeding NE PRAMS 2000



Overall 71.9% of woman attempted breastfeeding. Hispanic women reported the highest frequency of breastfeeding at 81.1%, while only half (51.4%) of African Americans attempted to breastfeed.

Figure 19
Breastfeeding Duration Among Those who Initiated
NE PRAMS 2000



Overall, one quarter of women who initiated breastfeeding quit within the first month (including 5% who quit within the first week). However, a majority of the mothers who attempt breastfeeding continued to breastfeed more than 3 months. Because PRAMS surveys mothers 3 to 6 months post-partum, the data cannot determine if mothers are reaching the 6-month recommendation and beyond.

Infant Risk Reduction

The Survey Questions

Listed below are some items that describe the care of your new baby. For each item, circle A if it always applies to you, circle S if it sometimes applies to you, or circle N if it never applies to you.

a.	My new baby rides in an infant car seatN S	A
b.	My new baby takes a bottle to bed N S	A
c.	My new baby sleeps on something thing soft, like a fluffy	
	blanket or comforter, soft pillow, featherbed, or sheepskinN S	A

How do you most often lay your baby down to sleep now?

On his or her side
On his or her back
On his or her stomach

Discussion

Infant car seats can keep children safe in motor vehicle crashes. Infant rearfacing seats are designed for babies until at least 1 year old and/or 20-30 pounds. Infants must ride in the back seat facing the rear of the vehicle. ¹⁰

Early childhood dental caries is an infectious disease. There are many aspects of early childhood dental caries; baby bottle tooth decay is recognized as one of the more severe manifestations of this syndrome.¹¹

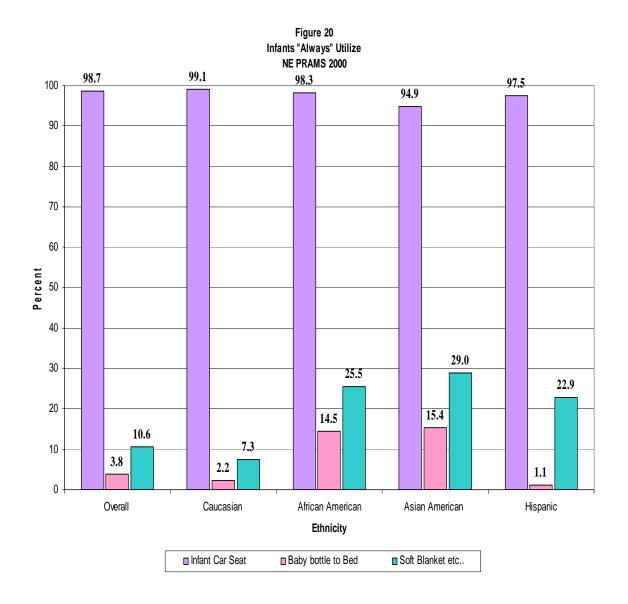
Soft sleeping surfaces are linked to an increased risk of Sudden Infant Death Syndrome (SIDS). Infants should always be put to sleep on a firm, flat mattress without pillows, fluffy blankets, or comforters¹².

Back sleeping is the preferred sleep position for newborns because it provides the best protection against SIDS. An infant who is 5 or 6 months old will begin to roll over in both directions; at that age the risk for SIDS begins drop, although not eliminated.

¹⁰ Car Safety Seats: A Guide for Families, 2004. American Academy of Pediatrics. http://www.aap.org/family/carseatguide.htm

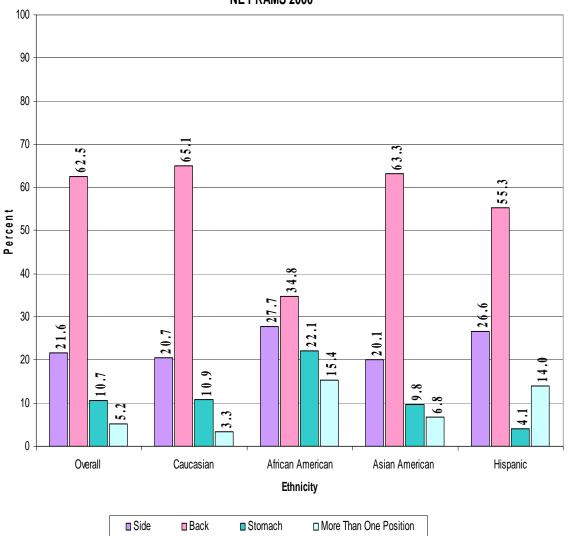
¹¹ American Dental Association Positions & Statements: ADA statement on early childhood caries (Trans. 2000:454) http://www.ada.org/prof/resources/positions/statements/caries.asp

¹² Reducing the Risk of SIDS. American SIDS Institute. http://www.sids.org/nprevent.htm



Nearly 99% of the overall population always utilized an infant car seat. This high prevalence was consistent across the sub-populations. While only a very small percentage of the overall population (3.8%) reported always giving their infant a bottle in bed, Asian American (15.4%) and African American's (14.5%) had a significantly higher frequency. Finally, one in 10 Nebraska mothers always placed their infants to bed on a soft surface while nearly three in 10 Asian Americans utilized a soft surface.

Figure 20 Sleep Position NE PRAMS 2000



Overall, 62.5% of the population placed their infant on their backs to sleep. This was the most prevalent sleep position across all groups. However, African Americans had a much lower frequency (34.8%) than the rest of the population.